



# Australian Bureau of Statistics

## 1350.0 - Australian Economic Indicators, Mar 2002

ARCHIVED ISSUE Released at 11:30 AM (CANBERRA TIME) 28/02/2002

### Special Article - Foreign ownership characteristics of information technology businesses

This article was published in **Australian Economic Indicators** (Cat. No. 1350.0), March 2002

#### SUMMARY

As part of an initiative to expand the data available on globalisation issues, the ABS has embarked on a series of studies of the economic activity of majority foreign-owned businesses in Australia.

The most recent study examines the foreign ownership characteristics of specialist Information Technology (IT) businesses in 1998-1999, with the results showing a strong contribution by majority foreign-owned businesses. Majority foreign-owned businesses dominate the Wholesale Trade of IT goods, both in terms of employment and income. In the Computer Services industry, they provide a similar level of employment to Australian-owned businesses, but they again account for more than half the income. Foreign-owned businesses involved in the manufacture of IT goods have a similar level of employment and income as Australian-owned businesses manufacturing IT goods, however this industry experienced significant decline between 1995-1996 and 1998-1999 and was a minor contributor to the IT "industry" as a whole.

Majority USA-owned businesses had the largest economic activity of foreign owned businesses to the extent that they rivalled Australian-owned businesses in terms of employment and exceeded Australian-owned businesses in terms of income.

#### INTRODUCTION

This article outlines the results of a study of information technology businesses in the 1998-1999 financial year and presents estimates of income, employment, and wages and salaries for Australian resident businesses specialising in IT goods and services, classified by whether they are majority Australian or majority foreign-owned<sup>1</sup> (hereafter the word 'majority' is omitted but it is implied). It also shows a breakdown by broad industry and by country of majority ownership.

Work is currently underway on studies of the IT industry in the 2000-2001 financial year.

#### DATA SOURCES

This study uses data collected by the ABS as part of the 1998-1999 Information Technology Survey, published in **Information Technology, Australia 1998-1999** (ABS Cat. no. 8126.0). Businesses in that survey were linked to the foreign ownership characteristics from the ABS Survey of International Investment for those businesses included in both surveys.

For other businesses, a number of other sources were used, with most ownership data compiled from extensive internet searches.

## SCOPE OF THIS STUDY

While the Information Technology Survey included the Telecommunications sector, this study excludes that sector because the split of data between Australian and foreign-owned would have breached ABS confidentiality requirements due to the fact that the Australian-owned businesses are dominated by one corporation.

## IT&T SPECIALISTS

The Information Technology Survey covers the main industries involved in the production and distribution of information technology and telecommunications (IT&T) goods and services as defined by international standards. Within these industries, there is a subset of businesses that specialise in IT&T which are the main focus of the statistics in **Information Technology, Australia 1998-1999** (ABS Cat. no. 8126.0), and therefore the main focus of this study.

Businesses are classified as IT&T Specialists if their IT&T income is 50% or more of the total income of the business.

## RESULTS

The 1998-1999 study shows that domestic IT specialists had experienced a period of strong growth between 1995-1996 and 1998-1999. Employment increased by 12% (to 124,874) and IT income grew by 15% (to \$33.4b). In terms of employment, the growth was dominated by an increase in the computer services industry (up 35% to 74,395), which outweighed a significant fall in IT manufacturing employment (down 39% to 10,542) while employment in the wholesale trade of IT goods industry remained virtually unchanged (up 1% to 39,936). In terms of IT income, both the computer services and wholesale trade industries showed strong growth (up 32% to \$10.3b and 21% to \$20.2b respectively), more than offsetting a significant fall in IT income for the manufacturing industry (down 36% to \$2.9b).

In 1998-1999, foreign-owned businesses made a strong contribution to the economic activity of the domestic IT businesses (see Table 1), employing nearly 54,000 (43% of all employment in IT), having IT income of \$20.1b (60%), total income from all sources of \$22.7b (62%) and paying wages and salaries of \$3.5b (54%). By comparison, businesses which were positively identified as Australian-owned provided employment of nearly 36,000 (29%), IT income of \$8.8b (26%), total income of \$9.2b (25%) and wages and salaries of \$1.7b (26%).

**TABLE 1: INDICATORS FOR IT SPECIALIST BUSINESSES BY OWNERSHIP GROUP, 1998-1999**

Ownership Group	Employment at end June 1999		IT Income		Total Income		Wages and IT Salaries		Average wage/salary per person employed	
	no.	%	\$m	%	\$m	%	\$m	%	\$'000	\$'000
Australian	35,869	29	8,760	26	9,174	25	1,723	26	244	48

Foreign	53,969	43	20,144	60	22,710	62	3,511	54	373	65
Unknown	35,035	28	4,531	14	4,649	13	1,295	20	129	37
Total	124,874	100	33,435	100	36,533	100	6,528	100	268	52

Economic activity was also undertaken by businesses for which we were not able to determine ownership characteristics (28% of employment, 14% of IT income, 13% of total income and 20% of wages and salaries). These businesses tended to be smaller in size and we expect most of them to be majority Australian-owned. The dominance of foreign-owned IT businesses would be reduced, particularly in respect of employment, if the ownership of "unknowns" was predominantly Australian. This is discussed further in the Appendix: Analysis of Businesses with Unknown Ownership.

IT income per person employed in foreign-owned businesses is higher than in Australian-owned businesses (\$373,000 compared with \$244,000), with the average wage/salary per person employed also following this pattern (\$65,000 compared with \$48,000). This result is consistent with a recent OECD study that found that foreign controlled manufacturing firms tended to pay their workers more (**OECD Observer** No. 220, April 2000).

Foreign-owned IT businesses in manufacturing (see table 2) accounted for 44% of the IT income derived, while those in wholesale trade accounted for 67% and in computer services 51%. IT income per person employed for manufacturing and wholesale industries showed relatively little difference between Australian and foreign-owned businesses, but in computer services the foreign-owned businesses had significantly higher IT income per person employed.

**TABLE 2: INDICATORS FOR IT SPECIALISTS BY BROAD INDUSTRY BY OWNERSHIP GROUP, 1998-1999**

Ownership Group	Employment at end June 1999		IT Income		Total Income		Wages and IT Income Salaries		IT Income per person employed	Average wage/salary per person employed
	no.	%	\$m	%	\$m	%	\$m	%	\$'000	\$'000
MANUFACTURING										
Australian	4,396	42	1,337	45	1,404	43	189	39	304	43
Foreign	4,306	41	1,291	44	np	np	233	48	300	54
Unknown	1,841	18	314	11	np	np	64	13	171	35
Total	10,542	100	2,942	100	3,306	100	486	100	279	46
WHOLESALE TRADE										
Australian	9,020	23	4,412	22	4,669	21	396	17	489	44
Foreign	26,129	65	13,638	67	15,844	70	1,739	75	522	67
Unknown	4,786	12	*2,189	11	*2,239	10	197	8	458	41
Total	39,936	100	20,239	100	22,752	100	2,332	100	507	58
COMPUTER SERVICES										
Australian	22,454	30	3,011	29	3,100	30	1,138	31	134	51
Foreign	23,534	32	5,215	51	np	np	1,539	42	222	65
Unknown	28,409	38	2,027	20	np	np	1,034	28	71	36
Total	74,395	100	10,253	100	10,474	100	3,711	100	138	50

TOTAL

Total	124,874	100	33,435	100	36,533	100	6,528	100	268	52
-------	---------	-----	--------	-----	--------	-----	-------	-----	-----	----

\* Relative Standard Error (RSE) for this cell is between 25% and 50%.  
np not published due to confidentiality

Table 3 presents indicators for countries with significant investment in the domestic IT industry. It shows that businesses with majority ownership from the USA provided almost as much employment as businesses which were specifically identified as Australian-owned (32,000 and 36,000 respectively), and derived more IT income (\$10.5b and \$8.8b respectively).

**TABLE 3: INDICATORS FOR IT SPECIALISTS BY COUNTRY OF MAJORITY OWNERSHIP, 1998-1999**

Ownership Group	Employment at end June 1999		IT Income		Total Income		Wages and Salaries		IT Income per person employed	Average wage/salary per person employed
	no.	%	\$m	%	\$m	%	\$m	%	\$'000	\$'000
Australia	35,869	29	8,760	26	9,174	25	1,723	26	244	48
USA	31,797	26	10,506	31	11,588	32	2,152	33	330	68
European Union	10,290	8	4,797	14	5,414	15	675	10	466	66
of which										
UK	2,448	2	636	2	np	np	155	2	260	63
Germany	*1894	2	*673	2	np	np	*145	2	355	77
Netherlands	1,871	2	*1,667	5	np	np	103	2	891	55
Japan	8,456	7	*3,920	12	*4,513	12	487	8	*464	58
Other Foreign Countries	3,426	3	921	3	1,195	3	197	3	269	58
Unknown	35,035	28	4,531	14	4,649	13	1,295	20	129	37
Total	124,874	100	33,435	100	36,533	100	6,528	100	268	52

\* RSE for this cell is between 25% and 50%.  
np not published due to confidentiality

Businesses with majority ownership from the European Union made a significant contribution across the board, providing employment of over 10,000 (8% of all employment) and deriving IT income of \$4.8b (14%). Japan was the most significant contributor to the estimates from the Asian region, with businesses with Japanese majority ownership providing employment of over 8,000 (7%) and IT income of \$3.9b (12%).

## FURTHER INFORMATION

For more information about the foreign ownership of IT businesses, contact Glen Malam on 02 6252 5040 or email [glen.malam@abs.gov.au](mailto:glen.malam@abs.gov.au).

## FOOTNOTES

1. Businesses are determined to be majority foreign-owned if more than 50% of their equity is held by foreigners.

## REFERENCES

## Balance of Payments and International Investment Position, Australia (Cat. no. 5302.0)

Foreign Ownership of Equity, published in **Australian Economic Indicators** (Cat. no. 1350.0), January 2002

## Information Technology, Australia 1998-1999 (Cat. no. 8126.0)

OECD Observer No. 220, April 2000

Ownership Characteristics of Businesses undertaking Capital Expenditure in Australia, published in **Australian Economic Indicators** (Cat. no. 1350.0), July 2001

## APPENDIX: ANALYSIS OF BUSINESSES WITH UNKNOWN OWNERSHIP

When conducting this study, it was not possible to establish the ownership of a significant number of units, as shown in the preceding tables. An analysis of these unknown units, classified by employment size of the business, is provided in Tables 4 (employment) and 5 (income). Employment for those businesses with unknown ownership is dominated by businesses in the computer services industry (81% of employment for unknown businesses), but unknown businesses in this industry only contributed 45% of total unknown business income. Businesses with 0-4 employees in the computer services industry accounted for 56% of total unknown employment, and 28% of total unknown IT income.

**TABLE 4: ANALYSIS OF UNKNOWN UNITS-ESTIMATED EMPLOYMENT OF UNKNOWN BUSINESSES, BY EMPLOYMENT SIZE**

Detailed Industry (ANZSIC)	0 - 4		5 - 19		20 +		Total	
	no.	% (a)	no.	% (a)	no.	% (a)	no.	% (a)
Manufacturing	244	1	699	2	897	3	1,841	5
Wholesale Trade	1,703	5	1,551	4	1,532	4	4,786	14
Computer Services	19,685	56	6,086	17	2,638	8	28,409	81
Total	21,632	62	8,336	24	5,067	15	35,035	100

(a) of all unknowns

**TABLE 5: ANALYSIS OF UNKNOWN UNITS-ESTIMATED IT INCOME OF UNKNOWN BUSINESSES, BY EMPLOYMENT SIZE**

Detailed Industry (ANZSIC)	0 - 4		5 - 19		20 +		Total	
	no.	% (a)	no.	% (a)	no.	% (a)	no.	% (a)
Manufacturing	*35	1	*114	3	*166	4	314	7
Wholesale Trade	**946	21	439	10	804	18	*2,189	48
Computer Services	1,277	28	518	11	233	5	2,027	45
Total	2,258	50	1,071	24	1,202	27	4,531	100

(a) of all unknowns

\* RSE for this cell is between 25% and 50%.

\*\* RSE for this cell is greater than 50%

Considering the nature of the computer services industry, it is thought unlikely that businesses with 4 or fewer employees would have majority foreign-ownership. Accordingly, the data were recalculated assuming that all unknown computer services businesses with fewer than 5 employees were majority Australian-owned. The results are presented in Table 6. The conclusions from Table 1 remain valid: Foreign-owned businesses would still dominate the economic activity of the IT industry in terms of IT income, total income and wages and salaries, but Australian majority owned businesses would then employ approximately the same number of people as foreign-owned businesses.

**TABLE 6: ANALYSIS OF UNKNOWN UNITS - INDICATORS FOR IT&T SPECIALISTS IF COMPUTER SERVICES BUSINESSES WITH FEWER THAN 5 EMPLOYEES WITH UNKNOWN OWNERSHIP CHARACTERISTICS ARE ASSUMED TO BE AUSTRALIAN OWNED**

Ownership Group	Employment at end June 1999		IT Income		Total Income		Wages and Salaries		IT Income person employed	Average wage/ salary per person employed
	no.	%	\$m	%	\$m	%	\$m	%	\$'000	\$'000
Australian	55,554	45	10,037	30	10,474	29	2,413	37	181	43
Foreign	53,969	43	20,144	60	22,710	62	3,511	54	373	65
Unknown	15,350	12	3,254	10	3,349	9	604	9	212	39
Total	124,874	100	33,435	100	36,533	100	6,528	100	268	52

This page last updated 8 December 2006

© Commonwealth of Australia

All data and other material produced by the Australian Bureau of Statistics (ABS) constitutes Commonwealth copyright administered by the ABS. The ABS reserves the right to set out the terms and conditions for the use of such material. Unless otherwise noted, all material on this website – except the ABS logo, the Commonwealth Coat of Arms, and any material protected by a trade mark – is licensed under a Creative Commons Attribution 2.5 Australia licence